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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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NUTTER MCCLENNEN & FISH LLP  
WORLD TRADE CENTER WEST  
155 SEAPORT BOULEVARD  
BOSTON, MA 02210-2604

EXAMINER

NGUYEN, HAI V

ART UNIT PAPER NUMBER

2142

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/843,609

Applicant(s)

HERLIHY, MAURICE

Examiner

Hai V. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4 and 6-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

1. This Office Action is in response to the communication received on 23 February 2006.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 February 2006 has been entered.
3. Claims 2, 5, 25 are cancelled.
4. Claims 1, 3-4, and 6-24 are presented for examination.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 10, 11, 13 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claims Objections***

6. Claim 11 is objected to because of the following informalities:
7. Claim 11 does not claim whether it is a method or a system or a computer program embedded in the computer readable medium in its preamble. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 10, 11, 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claims 1, 10, 11, 13 recite the limitation "the executing step" in claims 1, 10, 11, 13. There is insufficient antecedent basis for this limitation in the claims.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 3-4, 10, 13, 20, 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by **Schanze** U.S. patent # **6,003,136**.

13. As to claim 1, Schanze discloses substantially the invention as claimed, including a digital data computing method comprising:

utilizing a set of secured instructions and secured memory local to a client to execute, on the client, a process that makes requests and that requires at least asynchronous responses to those requests in order to continue operation (*Schanze, the original client requests for Kerberos service from Kerberos Server*) (*Schanze, Abstract, Figs. 4, 6-8,*

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col. 3, lines 23 –54; col. 13, line 4 –col. 14, line 60; col. 15, line 21 – col. 18, line 41; col. 18, line 41 – col. 20, line 62);

generating, on a server, those responses external to the process and supplying them to that process (*Schanze, the Kerberos server creates an unsolicited response message*) (*Schanze, Abstract, Figs. 4, 6-8, col. 3, lines 23 –54; col. 13, line 4 –col. 14, line 60; col. 15, line 21 – col. 18, line 41; col. 18, line 41 – col. 20, line 62*);

the executing step including continuing operation of the process when at least asynchronous responses are received to the requests and otherwise discontinuing the operation of the process, being no real-time dependency of that process to those responses, while operation of the process is continuing (*Schanze, the Kerberos server creates an unsolicited response message which is delivered by the COMS and MCS programs to the original client on an asynchronous basis. The originating client is not disabled from continuing to function on subsequent requests even though the original service request is still pending*) (*Schanze, Abstract, Figs. 4, 6-8, col. 3, lines 23 –54; col. 13, line 4 –col. 14, line 60; col. 15, line 21 – col. 18, line 41; col. 18, line 41 – col. 20, line 62*).

14. As to claim 3, Schanze discloses performing the executing step on a server that comprises a secured coprocessor local to the client (*Schanze, Abstract, Figs. 4, 6-8*).

15. As to claim 4, Schanze discloses performing the executing step on a server that is remote with respect to the client (*Schanze, Abstract, Figs. 4, 6-8*).

16. Claim 10 has similar limitations of claim except for the limitation of wherein the generating step includes generating non-deterministic responses (*Shanze, unsolicited*

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*response message*) to the requests (*Schanze, Abstract, Figs. 4, 6-8, col. 3, lines 23 – 54; col. 13, line 4 – col. 14, line 60; col. 15, line 21 – col. 18, line 41; col. 18, line 41 – col. 20, line 62*).

17. Claim 13 had similar limitations of claim 1; therefore, it is rejected under the same rationale as in claim 1.

18. As to claim 20, Schanze discloses wherein generating non-deterministic responses (*Schanze, unsolicited response message*) to the requests (*Schanze, Abstract, Figs. 4, 6-8, col. 3, lines 23 – 54*).

19. Claims 23-24 have similar limitations of claims 3-4; therefore, they are rejected under the same rationale as in claims 3-4.

### ***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 6-9, 11-12, 14-19, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schanze** U.S. patent # **6,003,136** as applied to claims 1, 3-4 above, and further in view of **Ananda et al.** U.S. patent # **5,495,411**.

22. As to claim 6, Schanze does not explicitly disclose wherein it is computationally difficult to unauthorizedly simulate generation of the responses.

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In the same field of endeavor, Ananda discloses wherein it is computationally difficult to unauthorizedly simulate generation of the responses (*Ananda, Abstract, Figs. 5, 7, 10; col. 2, line 45 – col. 5, line 39*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Ananda's teachings of using continuous asynchronous password verification (*Abstract, Figs. 5, 7, 10; col. 2, line 45 – col. 5, line 39*) with the teachings of Schanze for the *purpose of preventing the user from copying the application software to a storage device of the remote computer (Ananda, Abstract)*.

23. As to claim 7, Schanze-Ananda discloses, wherein the executing step includes executing transformed code and wherein it is computationally difficult to determine proper responses to the requests without access to at least a portion of that code prior to a transformation that produces that transformed code (*Ananda, Abstract, Figs. 5, 7, 10; col. 2, line 45 – col. 5, line 39*).

24. As to claim 8, Schanze-Ananda discloses performing the transformation automatically (*Ananda, Abstract, Figs. 5, 7, 10; col. 2, line 45 – col. 5, line 39*).

25. As to claim 9, Schanze-Ananda discloses performing the transformation manually (*Ananda, Abstract, Figs. 5, 7, 10; col. 2, line 45 – col. 5, line 39*).

26. Claim 11 has similar limitations of claims 1, 7; therefore, it is rejected under the same rationale as in claims 1, 7.

27. As to claim 12, Schanze-Ananda discloses securing the generation of responses against any of unauthorized use, access, copying and functional analysis, and of

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controlling the execution of the process (*Schanze, Abstract, Figs. 4, 6-8, col. 3, lines 23 –54; col. 13, line 4 –col. 14, line 60; col. 15, line 21 – col. 18, line 41; col. 18, line 41 – col. 20, line 62; Ananda, Abstract, Figs. 5, 7, 10; col. 2, line 45 – col. 5, line 39*).

28. As to claim 14, Schanze-Ananda discloses, wherein the code is comprised of high level language or object code or any intermediary level set of computer instructions, or microcode (*Schanze, Abstract, Figs. 4, 6-8, col. 3, lines 23 –54; col. 13, line 4 –col. 14, line 60; col. 15, line 21 – col. 18, line 41; col. 18, line 41 – col. 20, line 62; Ananda, Abstract, Figs. 5, 7, 10; col. 2, line 45 – col. 5, line 39*).

29. As to claim 15, Schanze-Ananda discloses performing a transformation that includes generating any of code and data upon which the responses are based (*Schanze, Abstract, Figs. 4, 6-8, col. 3, lines 23 –54; col. 13, line 4 –col. 14, line 60; col. 15, line 21 – col. 18, line 41; col. 18, line 41 – col. 20, line 62; Ananda, Abstract, Figs. 5, 7, 10; col. 2, line 45 – col. 5, line 39*).

30. Claims 16-19, 21 have similar limitations of claims 8-9, 6-7, 11; therefore, they are rejected under the same rationale as in claims 8-9, 6-7, 10-11.

31. As to claim 22, Schanze-Ananda discloses, performing executing the code subsequent to transformation on the client (*Schanze, Abstract, Figs. 4, 6-8, col. 3, lines 23 –54; col. 13, line 4 –col. 14, line 60; col. 15, line 21 – col. 18, line 41; col. 18, line 41 – col. 20, line 62*).

32. Further references of interest are cited on Form PTO-892, which is an attachment to this action.



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### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 571-272-3901. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai V. Nguyen  
Examiner  
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THONG VU  
P.E.

